

CLAIMS

We claim:

1. A jewelry clasp comprising,
a first body having a magnetic means forming a flat, planar magnetically attractive surface having a north pole and a south pole,
a second body having a magnetic means forming a magnetically attractive surface having a north pole and a south pole, said magnetic means of said first and second bodies being aligned along a longitudinal centerline of the clasp,
said magnetically attractive surfaces adapted to be positioned in an abutting relationship with the poles of one of the bodies being aligned with the opposite poles of the other body,
a safety catch, said safety catch having one end pivotally mounted to one of said bodies and having a protrusion extending outwardly from the other end, said safety catch being rotatable about the pivotal mounting to a latched position wherein the protrusion engages the other body to latch the first and second bodies together.
2. The jewelry clasp as defined in claim 1 wherein said magnetic means comprises separate magnets, with one of said separate magnets having a south pole at said surface and the other of said separate magnets having a north pole at said surface.
3. The jewelry clasp as defined in claim 1 wherein said magnet means comprises a bipolar bar magnet having a north and a south pole.
4. The jewelry clasp as defined in claim 1 wherein said safety catch has a generally straight protrusion and said other body has an opening into which said straight protrusion interfits.

5. The jewelry clasp as defined in claim 1 wherein said safety catch has a protrusion having an inward lip that overlaps the other body.

6. A jewelry clasp as defined in claim 5 wherein said inward lip is located so as to move the other body along a line extending between the north and south poles of said magnetic means as said safety catch moves to said latched position to misalign said respective north and south poles of said first and second bodies , and said magnetic means causes said first and second bodies to move rapidly back to an aligned position when said safety catch reaches said latched position to realign said poles of one of the bodies with the opposites poles of the other body.

7. The jewelry clasp as defined in claim 6 wherein said rapid movement of said first and second bodies produces a click that can be heard and/or felt by a wearer.

8. The jewelry clasp as defined in claim 1 wherein said safety catch includes a magnetically attractive material and wherein said safety catch is held in its latched position by a magnetic attraction between said magnetically attractive material and said magnetic means of said first and second bodies.

9. A jewelry clasp comprising,
a first body having at least one recess and a magnetic means with a magnetically attractive surface having a north pole and a south pole located within said at least one recess, said north and south pole being aligned along a longitudinal centerline of the first body,
a second body having at least one recess and a magnetic means with a magnetically attractive surface having a north pole and a south pole located within said at least one recess, said north and south pole being aligned along a longitudinal centerline of the second body,

said magnetically attractive surfaces adapted to be positioned in an abutting relationship with the poles of one of the bodies being aligned with the opposite poles of the other body,

a safety catch, said safety catch having one end pivotally mounted to one of said bodies and having a protrusion extending outwardly from the other end, said safety catch being rotatable about the pivotal mounting to a latched position wherein the protrusion engages the other body to latch the first and second bodies together.

10. The jewelry clasp as defined in claim 9 wherein said first body and said second body each have two recesses formed therein and said magnetic means comprises a magnet located in each of said recesses of said first and second bodies, said magnets of said first and second bodies each having a north pole and a south pole at said surface of said first and second bodies.

11. The jewelry clasp as defined in claim 9 wherein said first and said second body each have one recess formed therein and said magnetic means comprises a bipolar bar magnet located in each of said one recess of said first and second bodies, each of said bar magnets having a north pole and a south pole.

12. The jewelry clasp as defined in claim 11 wherein the at least one recess has an upstanding peg located therein and said bar magnet has a bore with a countersink formed therein and said magnet is affixed within said at least one recess by said post passing through said bore and pressed into said countersink.

13. The jewelry clasp as defined in claim 9 wherein said at least one recess in said first and second bodies has a post extending upwardly within said at least one recess, and each magnetic means has a countersunk bore formed therein, said magnetic being affixed within said at least one recess by means of said post entering into said countersunk bore wherein said post flattens out within said countersunk bore to affix the magnetic means within said at least one recess.

14. The jewelry clasp as defined in claim 9 wherein said safety catch has a protrusion having an inward lip that overlaps the other body.

15. The jewelry clasp as defined in claim 14 wherein said inward lip is located so as to move the other body along a line extending between the north and south poles of said magnetic means as said safety catch moves to said latched position to misalign said respective north and south poles of said first and second bodies, and said magnetic means causes said first and second bodies to move rapidly back to an aligned position when said safety catch reaches said latched position to realign said poles of one of the bodies with the opposites poles of the other body.

16. The jewelry clasp as defined in claim 9 wherein said safety catch includes a magnetically attractive material and wherein said safety catch is held in its latched position by a magnetic attraction between said magnetically attractive material and said magnetic means of said first and second bodies.

17. A method of completing the connection of a jewelry clasp, said method comprising the steps of:

- providing a first body having a jewelry chain affixed thereto and having a surface with a magnetic means having a south pole and a north pole aligned along a longitudinal centerline of the jewelry clasp,

- providing a second body having a jewelry chain affixed thereto and having a surface with a magnetic means having a south pole and a north pole aligned along a longitudinal centerline of the jewelry clasp,

- joining the first and second bodies together by aligning and facing the north and south poles of one of said bodies with, respectively, the south and north poles of the other of said bodies,

- providing a safety catch affixed to one of the bodies and adapted to be movable to a latched position to engage the other of said bodies when said bodies are joined together to complete the connection of said first and second bodies together.

18. The method as defined in claim 17 wherein the step of providing a first body and a second with a magnetic means having a north pole and a south pole comprises providing a first body with a bi-polar bar magnet and a second body with a bi-polar bar magnet.

19. The method as defined in claim 18 wherein the step of providing a safety catch comprises providing a safety catch having a protrusion that extends outwardly and engages the other of said bodies

20. The method as defined in claim 19 wherein the step of providing a safety catch comprises providing a safety catch having a protrusion with an inwardly directed lip that overlaps the other body.

21. The method as defined in claim 19 wherein the step of providing a safety catch comprises providing a safety catch having a lip that displaces the other body along a longitudinal axis extending between the north and south poles to misalign the magnetic means of the first body and the magnetic means of the second body, and allowing the first and second bodies to rapidly move back to the aligned position wherein the opposite poles are aligned when the inwardly directed lip has overlapped the other body in the latched position.

22. The method as defined in claim 17 wherein the step of providing a safety catch comprises providing a safety catch having a magnetically attractive material and said safety catch is moved to its latched position wherein the magnetically attractive material of the safety catch is magnetically attracted to the magnetic means of the first and second bodies to retain the safety catch in its latched position.

23. The method of affixing a thin metal magnet to a body having a recess, said method comprising the steps of:
providing a thin metal magnet,

forming a bore having a countersunk area in the thin metal magnet;
providing a post comprised of a relatively soft material extending
upwardly from the recess to a distal end;

inserting the thin metal magnet into the recess in the body while
aligning the post to enter and pass through the bore wherein the distal end of the
post is positioned within the countersunk area, and

pressing the distal end of the post into the countersunk area to
securely affix the thin metal magnet to the body.